PUBLIC HEARING
18 MARCH 2014

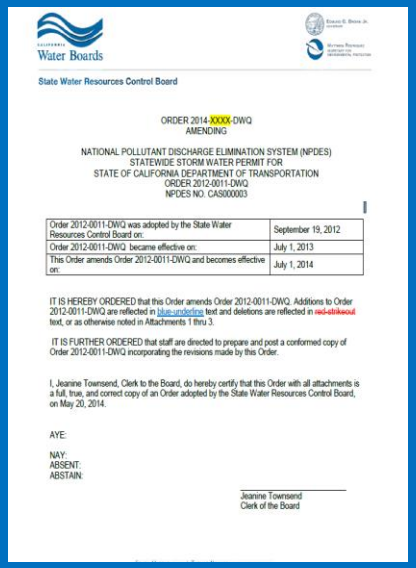
MUNICIPAL STORMWATER PERMIT AMENDMENT TO INCORPORATE TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

CALIFORNIA DEPARTMENT OF TRANSPORTATION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

OVERVIEW

- Considerations for TMDL Compliance Approach
- TMDL Pollutant Categories for common treatment and control actions
- Annual Compliance Units
- Attachment IV and Attachment V

Permit Amendment



State Water Resources Control Board

ORDER 2014-XXXX-DWQ
AMENDING

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
STATEWIDE STORM WATER PERMIT FOR
STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
ORDER 2012-0011-DWQ
NPDES NO. CAS000003

Order 2012-0011-DWQ was adopted by the State Water Resources Control Board on:	September 19, 2012
Order 2012-0011-DWQ became effective on:	July 1, 2013
This Order amends Order 2012-0011-DWQ and becomes effective on:	July 1, 2014

IT IS HEREBY ORDERED that this Order amends Order 2012-0011-DWQ. Additions to Order 2012-0011-DWQ are reflected in blue-underline text and deletions are reflected in red-strikeout text, or as otherwise noted in Attachments 1 thru 3.

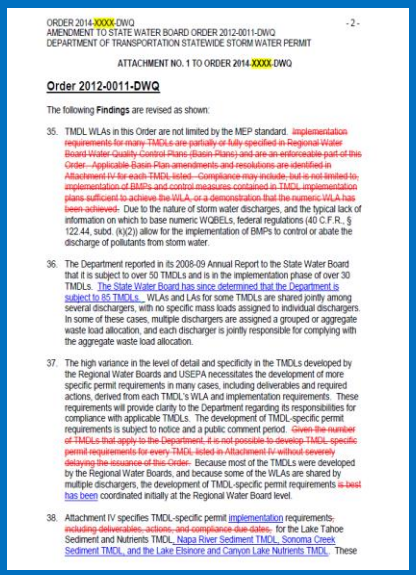
IT IS FURTHER ORDERED that staff are directed to prepare and post a conformed copy of Order 2012-0011-DWQ incorporating the revisions made by this Order.

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on May 20, 2014.

AYE:

NAY:
ABSENT:
ABSTAIN:

Jeanine Townsend
Clerk of the Board



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AMENDMENT TO STATE WATER BOARD ORDER 2012-0011-DWQ
DEPARTMENT OF TRANSPORTATION STATEWIDE STORM WATER PERMIT

ATTACHMENT NO. 1 TO ORDER 2014-XXXX-DWQ

Order 2012-0011-DWQ

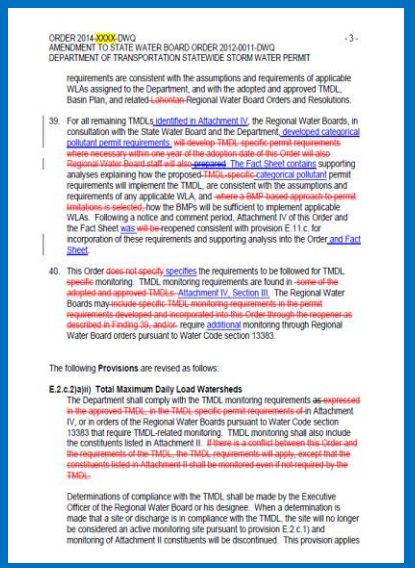
The following **Findings** are revised as shown:

35. TMDL WLAs in this Order are not limited by the MEP standard. ~~Implementation requirements for many TMDLs are partially or fully specified in Regional Water Board Water Quality Control Plans (Basin Plans) and are an enforceable part of this Order. Applicable Basin Plan amendments and resolutions are identified in Attachment IV for each TMDL listed. Compliance may include, but is not limited to, implementation of BMPs and control measures contained in TMDL implementation plans sufficient to achieve the WLA, or a demonstration that the numeric WLA has been achieved.~~ Due to the nature of storm water discharges, and the typical lack of information on which to base numeric WQBELs, federal regulations (40 C.F.R., § 122.44, subd. (k)(2)) allow for the implementation of BMPs to control or abate the discharge of pollutants from storm water.

36. The Department reported in its 2008-09 Annual Report to the State Water Board that it is subject to over 50 TMDLs and is in the implementation phase of over 30 TMDLs. The State Water Board has since determined that the Department is subject to 85 TMDLs. WLAs and LAs for some TMDLs are shared jointly among several dischargers, with no specific mass loads assigned to individual dischargers. In some of these cases, multiple dischargers are assigned a grouped or aggregate waste load allocation, and each discharger is jointly responsible for complying with the aggregate waste load allocation.

37. The high variance in the level of detail and specificity in the TMDLs developed by the Regional Water Boards and USEPA necessitates the development of more specific permit requirements in many cases, including deliverables and required actions, derived from each TMDL's WLA and implementation requirements. These requirements will provide clarity to the Department regarding its responsibilities for compliance with applicable TMDLs. The development of TMDL-specific permit requirements is subject to notice and a public comment period. ~~Given the number of TMDLs that apply to the Department, it is not possible to develop TMDL-specific permit requirements for every TMDL listed in Attachment IV without severely delaying the issuance of this Order.~~ Because most of the TMDLs were developed by the Regional Water Boards, and because some of the WLAs are shared by multiple dischargers, the development of TMDL-specific permit requirements ~~is best~~ has been coordinated initially at the Regional Water Board level.

38. Attachment IV specifies TMDL-specific permit implementation requirements ~~including deliverables, actions, and compliance due dates~~, for the Lake Tahoe Sediment and Nutrients TMDL, Napa River Sediment TMDL, Sonoma Creek Sediment TMDL, and the Lake Elsinore and Canyon Lake Nutrients TMDL. These



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DEPARTMENT OF TRANSPORTATION STATEWIDE STORM WATER PERMIT

requirements are consistent with the assumptions and requirements of applicable WLAs assigned to the Department, and with the adopted and approved TMDL, Basin Plan, and related ~~Lahontan~~ Regional Water Board Orders and Resolutions.

39. For all remaining TMDLs identified in Attachment IV, the Regional Water Boards, in consultation with the State Water Board and the Department, developed categorical pollutant permit requirements. ~~will develop TMDL-specific permit requirements where necessary within one year of the adoption date of this Order will also~~ Regional Water Board staff will also prepared. The Fact Sheet contains supporting analyses explaining how the proposed ~~TMDL-specific~~ categorical pollutant permit requirements will implement the TMDL, are consistent with the assumptions and requirements of any applicable WLA, and ~~where a BMP based approach to permit limitations is selected,~~ how the BMPs will be sufficient to implement applicable WLAs. Following a notice and comment period, Attachment IV of this Order and the Fact Sheet was will be reopened consistent with provision E.11.c. for incorporation of these requirements and supporting analysis into the Order and Fact Sheet.

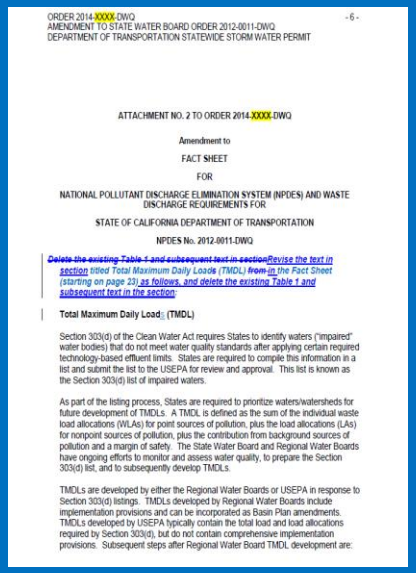
40. This Order does not specify specifies the requirements to be followed for TMDL specific monitoring. TMDL monitoring requirements are found in ~~some of the adopted and approved TMDLs~~ Attachment IV, Section III. The Regional Water Boards may include specific TMDL monitoring requirements in the permit ~~requirements developed and incorporated into this Order through the reopener as described in Finding 39, and/or,~~ require additional monitoring through Regional Water Board orders pursuant to Water Code section 13383.

The following **Provisions** are revised as follows:

E.2.c.2)a)ii) Total Maximum Daily Load Watersheds

The Department shall comply with the TMDL monitoring requirements ~~as expressed in the approved TMDL in the TMDL-specific permit requirements of~~ in Attachment IV, or in orders of the Regional Water Boards pursuant to Water Code section 13383 that require TMDL-related monitoring. TMDL monitoring shall also include the constituents listed in Attachment II. ~~If there is a conflict between this Order and the requirements of the TMDL, the TMDL requirements will apply, except that the constituents listed in Attachment II shall be monitored even if not required by the TMDL.~~

Determinations of compliance with the TMDL shall be made by the Executive Officer of the Regional Water Board or his designee. When a determination is made that a site or discharge is in compliance with the TMDL, the site will no longer be considered an active monitoring site pursuant to provision E.2.c.1) and monitoring of Attachment II constituents will be discontinued. This provision applies



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AMENDMENT TO STATE WATER BOARD ORDER 2012-0011-DWQ
DEPARTMENT OF TRANSPORTATION STATEWIDE STORM WATER PERMIT

ATTACHMENT NO. 2 TO ORDER 2014-XXXX-DWQ

Amendment to

FACT SHEET

FOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) AND WASTE DISCHARGE REQUIREMENTS FOR

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

NPDES No. 2012-0011-DWQ

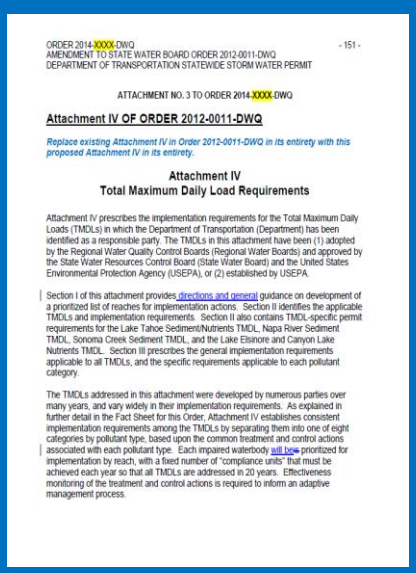
~~*Delete the existing Table 1 and subsequent text in section*~~*Revise the text in section titled Total Maximum Daily Loads (TMDL) from in the Fact Sheet (starting on page 29) as follows, and delete the existing Table 1 and subsequent text in the section:*

Total Maximum Daily Load(s) (TMDL)

Section 303(d) of the Clean Water Act requires States to identify waters ("impaired" water bodies) that do not meet water quality standards after applying certain required technology-based effluent limits. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters.

As part of the listing process, States are required to prioritize waters/watersheds for future development of TMDLs. A TMDL is defined as the sum of the individual waste load allocations (WLAs) for point sources of pollution, plus the load allocations (LAs) for nonpoint sources of pollution, plus the contribution from background sources of pollution and a margin of safety. The State Water Board and Regional Water Boards have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to subsequently develop TMDLs.

TMDLs are developed by either the Regional Water Boards or USEPA in response to Section 303(d) listings. TMDLs developed by Regional Water Boards include implementation provisions and can be incorporated as Basin Plan amendments. TMDLs developed by USEPA typically contain the total load and load allocations required by Section 303(d), but do not contain comprehensive implementation provisions. Subsequent steps after Regional Water Board TMDL development are:



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AMENDMENT TO STATE WATER BOARD ORDER 2012-0011-DWQ
DEPARTMENT OF TRANSPORTATION STATEWIDE STORM WATER PERMIT

ATTACHMENT NO. 3 TO ORDER 2014-XXXX-DWQ

Attachment IV OF ORDER 2012-0011-DWQ

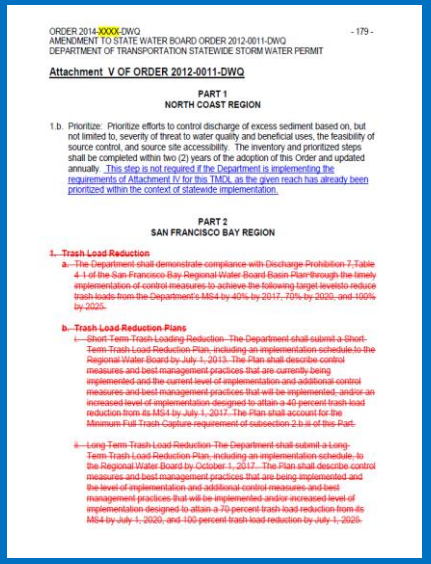
Replace existing Attachment IV in Order 2012-0011-DWQ in its entirety with this proposed Attachment IV in its entirety.

Attachment IV
Total Maximum Daily Load Requirements

Attachment IV prescribes the implementation requirements for the Total Maximum Daily Loads (TMDLs) in which the Department of Transportation (Department) has been identified as a responsible party. The TMDLs in this attachment have been (1) adopted by the Regional Water Quality Control Boards (Regional Water Boards) and approved by the State Water Resources Control Board (State Water Board) and the United States Environmental Protection Agency (USEPA), or (2) established by USEPA.

Section I of this attachment provides directions and general guidance on development of a prioritized list of reaches for implementation actions. Section II identifies the applicable TMDLs and implementation requirements. Section II also contains TMDL-specific permit requirements for the Lake Tahoe Sediment/Nutrients TMDL, Napa River Sediment TMDL, Sonoma Creek Sediment TMDL, and the Lake Elsinore and Canyon Lake Nutrients TMDL. Section III prescribes the general implementation requirements applicable to all TMDLs, and the specific requirements applicable to each pollutant category.

The TMDLs addressed in this attachment were developed by numerous parties over many years, and vary widely in their implementation requirements. As explained in further detail in the Fact Sheet for this Order, Attachment IV establishes consistent implementation requirements among the TMDLs by separating them into one of eight categories by pollutant type, based upon the common treatment and control actions associated with each pollutant type. Each impaired waterbody will be prioritized for implementation by reach, with a fixed number of "compliance units" that must be achieved each year so that all TMDLs are addressed in 20 years. Effectiveness monitoring of the treatment and control actions is required to inform an adaptive management process.



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Attachment V OF ORDER 2012-0011-DWQ

PART 1
NORTH COAST REGION

1.b. Prioritize: Prioritize efforts to control discharge of excess sediment based on, but not limited to, severity of threat to water quality and beneficial uses, the feasibility of source control, and source site accessibility. The inventory and prioritized steps shall be completed within two (2) years of the adoption of this Order and updated annually. This step is not required if the Department is implementing the requirements of Attachment IV for this TMDL as the given reach has already been prioritized within the context of statewide implementation.

PART 2
SAN FRANCISCO BAY REGION

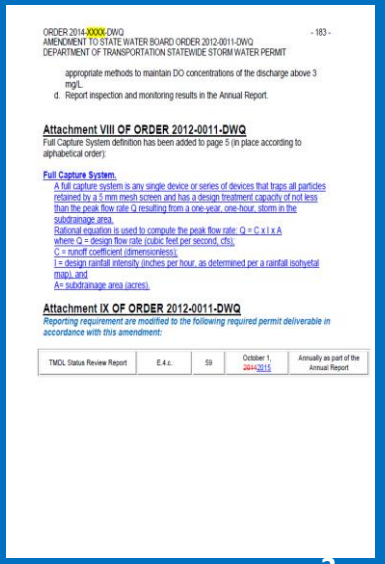
1. Trash Load Reduction

~~a. The Department shall demonstrate compliance with Discharge Prohibition 7.Table A.1 of the San Francisco Bay Regional Water Board Basin Plan through the timely implementation of control measures to achieve the following target levels to reduce trash loads from the Department's MS4 by 40% by 2017, 70% by 2020, and 100% by 2025.~~

~~b. Trash Load Reduction Plans~~

~~i. Short-Term Trash Loading Reduction. The Department shall submit a Short-Term Trash Load Reduction Plan, including an implementation schedule to the Regional Water Board by July 1, 2013. The Plan shall describe control measures and best management practices that are currently being implemented and the current level of implementation and additional control measures and best management practices that will be implemented, and/or an increased level of implementation designed to attain a 40 percent trash load reduction from its MS4 by July 1, 2017. The Plan shall account for the Minimum Full Trash Capture requirement of subsection 2.b.ii of this Part.~~

~~ii. Long-Term Trash Load Reduction. The Department shall submit a Long-Term Trash Load Reduction Plan, including an implementation schedule, to the Regional Water Board by October 1, 2017. The Plan shall describe control measures and best management practices that are being implemented and the level of implementation and additional control measures and best management practices that will be implemented and/or increased level of implementation designed to attain a 70 percent trash load reduction from its MS4 by July 1, 2020, and 100 percent trash load reduction by July 1, 2025.~~



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appropriate methods to maintain DO concentrations of the discharge above 3 mg/L.
d. Report inspection and monitoring results in the Annual Report.

Attachment VIII OF ORDER 2012-0011-DWQ

Full Capture System definition has been added to page 5 (in place according to alphabetical order):

Full Capture System.
A full capture system is any single device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour, storm in the subdrainage area.
Rational equation is used to compute the peak flow rate: Q = C x I x A
where Q = design flow rate (cubic feet per second, cfs);
C = runoff coefficient (dimensionless);
I = design rainfall intensity (inches per hour, as determined per a rainfall isohyetal map); and
A= subdrainage area (acres).

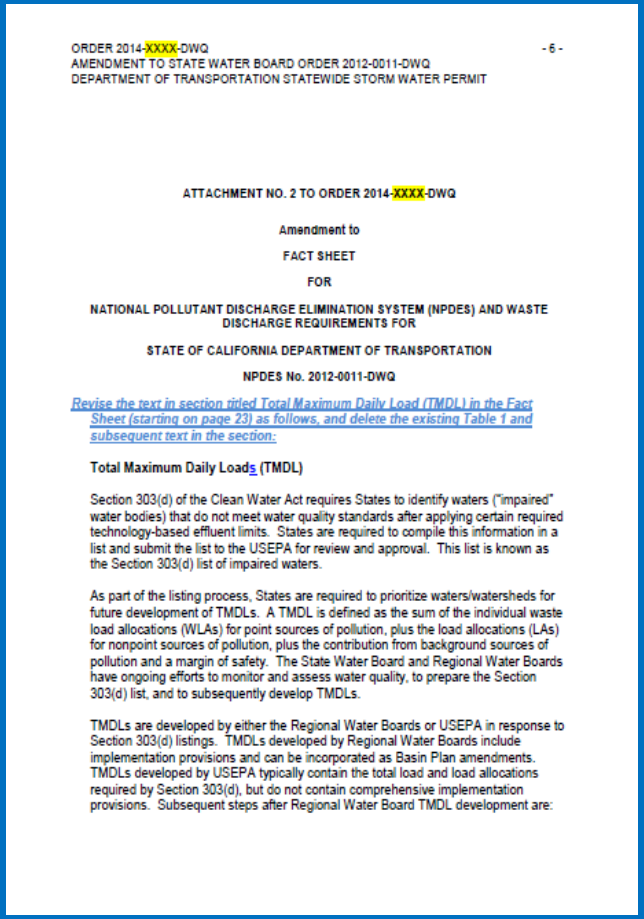
Attachment IX OF ORDER 2012-0011-DWQ

Reporting requirement are modified to the following required permit deliverable in accordance with this amendment:

TMDL Status Review Report	E.4.c.	59	October 1, ~~2014~~2015	Annually as part of the Annual Report

Fact Sheet

- Justification of the TMDL compliance approach, pollutant categories, and compliance units
- Consistent with the assumptions and requirements of the applicable Waste Load Allocations (WLAs),
- How the best management practices (BMPs) will be sufficient to implement applicable WLAs.



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Considerations for TMDL Compliance Approach

- Variability of how TMDLs are written
  - Commonalities of 85 TMDLs
  - Unique challenge for a non-traditional permittee
  - Caltrans' contribution
  - Multiple pollutants in impaired watersheds
  - Identifying sites that are a contributing source
  - Determining the appropriate best management practices (BMPs) & control measures
  - Phased implementation over several years

- Categorical Pollutant approach was developed to address TMDL compliance

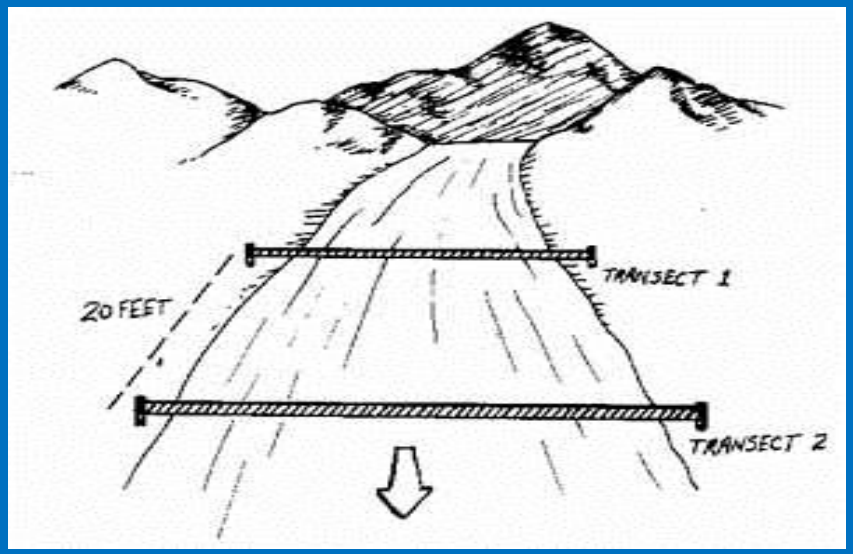
Pollutant Categories for BMP Implementation

- Eight TMDL Pollutant Categories
  - » TMDLs are separated by pollutant type
  - » Grouped for common treatment and control actions

- BMP Implementation in Prioritized Reaches
  - » Evaluate the reaches in the applicable TMDL watersheds to establish a prioritized list of reaches.
  - » Implementation activities begin within the highest priority reaches each year.

BMPs in Prioritized Reaches

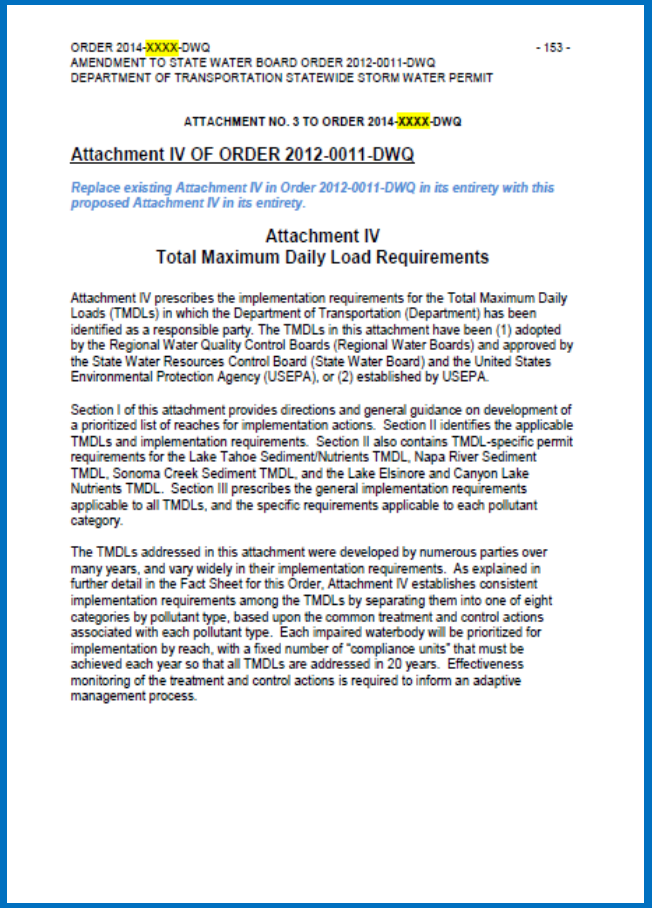
Reach - segment of a stream channel delineated by the TMDL or by Caltrans.



Attachment - IV

Attachment-IV prescribes the implementation requirements for all applicable TMDLs

- **Section I – provides direction and general guidance on development of prioritized list of reaches**
- **Section II – defines the applicable TMDLs and implementation requirements**
- **Section III – general & categorical requirements for :**
  - » BMP effectiveness monitoring
  - » Adaptive management, and
  - » Reporting to improve transparency



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Compliance Units

- Compliance Unit (CU) = 1 acre of Right-of-Way (ROW) from which runoff is retained, treated, and/or otherwise controlled prior to discharge.
- Determination of CUs considered the eight pollutant categories & acres of ROW that must be treated
- Minimum compliance units: 1,650 CUs/yr
- Tracking System & TMDL Status Review Report

Attachment-V
Region Specific Requirements

Region Specific Requirements related to TMDLs have been modified to complement the proposed TMDL compliance approach for the:

- North Coast Region
- San Francisco Bay Region

Caltrans Permit Amendment Summary

Focused and Streamlined Process to achieve compliance that contains:

- Consistent Implementation Requirements for all TMDLs, including future TMDLs
- Requires installation of control measures → BMP effectiveness monitoring → adaptive management → reporting
- Annual CUs are Tracked in Storm Water Multiple Application & Report Tracking System (SMARTS)
- Result in Time and Cost-efficiency for water quality improvements

Staff Contact Information

State Water Board
Municipal Storm Water Unit

Walt Shannon (916) 341-5497
Walt.Shannon@waterboards.ca.gov

Jaime Favila (916) 341-5482
Jaime.Favila@waterboards.ca.gov

Bill Hereth (916) 341-5688
Bill.Hereth@waterboards.ca.gov


Questions?